

What is claimed is:

1. A light heating apparatus having a flash lamp, a casing surrounding the flash lamp, a stage where a substrate is placed, and a power feeding apparatus for controlling emission of light from the flash lamp, wherein B/A is greater than 1.0 wherein integrated radiant intensity of the light in a range of 220 to 370 nm wavelength is represented as A and integrated radiant intensity of the light in a range of 370 to 800 nm wavelength.

2. The light heating apparatus according to claim 1, the light from the flash lamp is emitted on the substrate through a light-transmitting member.

3. The light heating apparatus according to claim 1, further including a pre-heating lamp.

4. The light heating apparatus according to claim 2, wherein the light-transmitting member is airtight.

5. The light heating apparatus according to claim 2, wherein light emission density on the surface of the stage is more than 20 J/cm^2 .

6. A light heating apparatus comprising:

a flash lamp that emits light on a substrate; and

a stage where the substrate is placed,

wherein B/A is greater than 1.0 wherein integrated radiant intensity of the light in a range of 220 to 370 nm wavelength is represented as A and integrated radiant intensity of the light in a range of 370 to 800 nm wavelength is represented as B.

7. A method for emitting light on a substrate, comprising the steps of:

placing the substrate on a predetermined place; and

emitting light on the substrate;

wherein B/A is greater than 1.0 wherein integrated radiant intensity of the light in a range of 220 to 370 nm wavelength is represented as A and integrated radiant intensity of the light in a range of 370 to 800 nm wavelength.

8. The method for emitting light on a substrate according to claim 7, in the step of emitting light, the light passes through a light transmitting member.

9. The method for emitting light on a substrate according to claim 8, wherein light emission density on the substrate is more than 20 J/cm^2 .

10. The method for emitting light on a substrate according to claim 1, further including a step of pre-heating the substrate.